

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: March 24, 2004, 22:33:46 ; Search time 45 Seconds

(without alignments)
1801.178 Million cell updates/sec

Title: US-09-900-038a-1
Perfect score: 1590
Sequence: 1 MNYSIMSYNNEPLNVRDS.....LINDINILVTLFGGEKQSD 313

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 1049977 seqs, 258955339 residues

Total number of hits satisfying chosen parameters: 1049977

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Database:

Published Applications AA:
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2: /cgn2_6/ptodata/2/pubppaa/PCT_NEW_PUB.pep.*
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17: /cgn2_6/ptodata/2/pubppaa/US60_PUBCOMB.pep.*
18: /cgn2_6/ptodata/2/pubppaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1590	100.0	313	US-09-900-038a-1	Sequence 1, Appl1
2	367	23.1	333	US-10-282-122a-52072	Sequence 52072, A
3	348.5	21.9	336	US-10-282-122a-51835	Sequence 51835, A
4	317	19.9	333	US-10-282-122a-52169	Sequence 52169, A
5	240.5	15.1	297	US-09-816-626-3905	Sequence 3905, Ap
6	237	14.9	297	US-09-816-028a-31	Sequence 31, Appl
7	237	14.9	297	US-10-303-161-31	Sequence 31, Appl
8	237	14.9	297	US-10-303-118-31	Sequence 31, Appl
9	237	14.9	297	US-10-303-128-31	Sequence 31, Appl
10	237	14.9	297	US-10-303-134-31	Sequence 31, Appl
11	237	14.9	297	US-10-303-162-31	Sequence 31, Appl
12	234	14.7	301	US-09-816-028a-27	Sequence 27, Appl
13	234	14.7	301	US-10-303-161-27	Sequence 27, Appl
14	234	14.7	301	US-10-303-118-27	Sequence 27, Appl
15	234	14.7	301	US-10-303-128-27	Sequence 27, Appl

16	234	14.7	301	US-10-303-134-27	Sequence 27, Appl
17	234	14.7	301	US-10-303-162-27	Sequence 27, Appl
18	230.5	14.5	249	US-10-282-122a-53337	Sequence 53337, A
19	223	14.0	210	US-09-767-041-47	Sequence 47, Appl
20	218	13.7	874	US-10-282-122a-52215	Sequence 52215, A
21	216.5	13.6	1047	US-10-282-122a-56851	Sequence 56851, A
22	216	13.6	706	US-09-815-242-4950	Sequence 4950, Ap
23	216	13.6	713	US-10-282-122a-44526	Sequence 44526, A
24	216	13.6	713	US-10-282-122a-56852	Sequence 56852, A
25	216	13.6	715	US-09-815-242-10511	Sequence 10511, A
26	214	13.5	269	US-09-767-041-41	Sequence 41, Appl
27	210.5	13.2	348	US-10-654-528-3	Sequence 3, Appl
28	210.5	13.2	348	US-10-654-528-11	Sequence 11, Appl
29	210.5	13.2	348	US-10-007-267-3	Sequence 3, Appl
30	210.5	13.2	348	US-10-007-267-11	Sequence 11, Appl
31	210.5	13.2	348	US-10-096-129-3	Sequence 3, Appl
32	210.5	13.2	348	US-10-096-129-8	Sequence 8, Appl
33	210	13.2	322	US-09-767-041-34	Sequence 34, Appl
34	206.5	13.0	335	US-10-282-122a-74482	Sequence 74482, A
35	204.5	12.9	438	US-10-282-122a-60207	Sequence 60207, A
36	204	12.8	421	US-10-282-122a-48233	Sequence 48233, A
37	202.5	12.7	317	US-10-282-122a-73707	Sequence 73707, A
38	200	12.6	270	US-09-816-028a-39	Sequence 39, Appl
39	200	12.6	270	US-10-303-118-39	Sequence 39, Appl
40	200	12.6	270	US-10-303-118-39	Sequence 39, Appl
41	200	12.6	270	US-10-303-134-39	Sequence 39, Appl
42	200	12.6	270	US-10-303-162-39	Sequence 39, Appl
43	200	12.6	270	US-10-282-122a-67193	Sequence 67193, A
44	200	12.6	337	US-10-282-122a-58582	Sequence 58582, A
45	196.5	12.4	294	US-10-282-122a-58582	Sequence 58582, A

ALIGNMENTS

RESULT 1
US-09-900-038a-1 Application US/09900038A
Sequence 1, Appl1
Patent No. US0020142425A1
GENERAL INFORMATION:
APPLICANT: Miyake, Katsunide
APPLICANT: Watanabe, Masaki
APPLICANT: Iijima, Shinji
TITLE OF INVENTION: Beta 1,3-galactosyltransferase and DNA encoding the same
FILE REFERENCE: 766.53
CURRENT APPLICATION NUMBER: US/09/900,038A
CURRENT FILING DATE: 2001-09-21
PRIOR APPLICATION NUMBER: JP 2001-392
PRIOR FILING DATE: 2001-01-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
LENGTH: 313
TYPE: PRT
ORGANISM: Streptococcus agalactiae Type Ib
US-09-900-038a-1

Query Match 100.0%; Score 1590; DB 9; Length 313;

Best Local Similarity 100.0%; Pred. No. 1,1e-15;
Matches 313; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	MNYSIMSYNNEPLNVRDSVSINQTLTDEFFITVDNPSRGDKOFLTEYSVVDRI	60
DB	1	MNYSIMSYNNEPLNVRDSVSINQTLTDEFFITVDNPSRGDKOFLTEYSVVDRI	60
QY	61	KILNEENIGLASLTKAVKISKGEYIFRMDADISYSPRFDKQIRFMENSLDSATLI	120
DB	61	KILNEENIGLASLTKAVKISKGEYIFRMDADISYSPRFDKQIRFMENSLDSATLI	120
QY	121	ELIDQGNLVYQREBNKTYLINDIRKMLNSILAHPTWCYKKVFDKMGYRDLVPVE	180
DB	121	ELIDQGNLVYQREBNKTYLINDIRKMLNSILAHPTWCYKKVFDKMGYRDLVPVE	180

QY 181 DYDFAIRGALADPEKIGLNLKVLQYRLNENG:SQTNKFOQYISALIDPFYKESYIDIT 240
DB 181 DYDFAIRGALADPEKIGLNLKVLQYRLNENG:SQTNKFOQYISALIDPFYKESYIDIT 240
QY 241 KITNYFOEYVIXKRYQOELSKYFELKSTPSITIRKLYICLYLFPKSPVLRLLINDINI 300
DB 241 KITNYFOEYVIXKRYQOELSKYFELKSTPSITIRKLYICLYLFPKSPVLRLLINDINI 300
QY 301 LVKLFGKQKSD 313
DB 301 LVKLFGKQKSD 313

RESULT 2
US-10-282-122A-52072
Sequence 52072, Application US/10282122A
Publication No. US20040029129A1
GENERAL INFORMATION:
APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John
APPLICANT: Carr, Grant
APPLICANT: Yamamoto, Robert
APPLICANT: Forsyth, R.
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: 60/230,347
PRIOR FILING DATE: 2000-09-09
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 78614
SOFTWARE: PatentIn version 3.1
SEQ ID NO 52072
LENGTH: 333
TYPE: PRT
ORGANISM: Clostridium acetobutylicum
US-10-282-122A-52072

Query Match 23.1%; Score 367; DB 12; Length 333;
Best Local Similarity 33.3%; Pred. No. 6.5e-25;
Matches 93; Conservative 62; Mismatches 92; Indels 32; Gaps 10;

QY 4 STMSVNEPLNVRDSESLINOTLDPFEFLIYINDPSGDLKQFLTEYSVDNRKIL 63
DB 5 SVMPVNSE-KYLESESLINOSYDLEFIINDSGDNGSK-TKEVAKLDKRLNV- 61
QY 64 LNEENIGLASSLNVAKISKEVYFRMDADISYPSFQKQIRMEEN-SLDSFATLIEL 122

DB 62 ISRENKGIYSLNEAIRLANGEVIAEMDADISAPRIEIKQISFLKSHDIDILGTQVKY 121
QY 123 IDQGNLVYQRESNKRILYNDI-----RKMLNR-SILAPTWCVKKVFDKLMGYRDLY 177
DB 122 VGNISNDI-KEKENKLNIFEDYDNRKELINWVCLNHPSTVMPFKDILRELKGYNDF- 179
QY 178 PVEDYFAIRGALADPEKIGLNLKVLQYRLNENGISQTNKFOQYISALIDPFYKESYI 237
DB 180 KSEDLDMRLAISGFIYKLKEELIYFRWHEESKTRVDN-----QNYEGKDG 229
QY 238 DITKITNYFOEYVIXKY-----TQOELSKYFE 265
DB 230 KIKLIDVFKRPFKQDFKTIWGAISNGSKTKVEYVDFE 268

RESULT 3
US-10-282-122A-51835
Sequence 51835, Application US/10282122A
Publication No. US20040029129A1
GENERAL INFORMATION:
APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John
APPLICANT: Carr, Grant
APPLICANT: Yamamoto, Robert
APPLICANT: Forsyth, R.
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: 60/230,347
PRIOR FILING DATE: 2000-09-09
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 78614
SOFTWARE: PatentIn version 3.1
SEQ ID NO 51835
LENGTH: 336
TYPE: PRT
ORGANISM: Clostridium acetobutylicum
US-10-282-122A-51835

Query Match 21.9%; Score 348.5; DB 12; Length 336;
Best Local Similarity 36.6%; Pred. No. 3.1e-23;
Matches 90; Conservative 46; Mismatches 95; Indels 15; Gaps 8;

QY 4 STMSVNEPLNVRDSESLINOTLDPFEFLIYINDPSRGLKQFLTEYSVDNRKIL 63
DB 8 STMPVNSE-RYLALESILDTQYNDPFEFLIV-DGSDTESYNIISYANKKRL-IV 64

Db 241 ROFLNFT---WGAQVTRYGLKAGMT 267

RESULT 6
US-09-816-028A-31
Sequence 31, Application US/09816028A
Patent No. US20020042369A1
GENERAL INFORMATION:
APPLICANT: Gilbert, Michel
APPLICANT: Wakarchuk, Warren W.
APPLICANT: National Research Council of Canada
TITLE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis of
FILE REFERENCE: 019633-000111US
CURRENT APPLICATION NUMBER: US/09/816,028A
CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: US 60/118,213
PRIOR FILING DATE: 1999-02-01
PRIOR APPLICATION NUMBER: US 09/495,406
PRIOR FILING DATE: 2000-01-31
NUMBER OF SEQ ID NOS: 49
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 31
LENGTH: 297
TYPE: PRT
ORGANISM: Campylobacter jejuni
FEATURE:
OTHER INFORMATION: beta-1,3 galactosyl transferase from C. jejuni O:10
US-09-816-028A-31

Query Match 14.9%; Score 237; DB 9; Length 297;
Best Local Similarity 27.8%; Pred. No. 3,3e-13; Matches 85; Conservative 61; Mismatches 112; Indels 48; Gaps 14;
Db 85; Conservative 61; Mismatches 112; Indels 48; Gaps 14;
QY 4 SIMSVNEPLNVRSDVESILNQTLDPEFIIIVIDNPSRGDLKQFLTEYSVVDNRKIL 63
D 5 SILPTVNE-QYIARAIBSCINQTFKNE-IIVDDCGSDSIDIVKEYAKKDDRIKIL 62
QY 64 LNEENIGLASSLNKAVKISGEYIFRMDADDISYSPRFDKQIRFMEENSID--FSATLI 120
D 63 HNEENKLTARAYEGVAVNSPYIMFLDPDYEELNACECKMLKNNIEDLFFNAFVL 122
QY 121 E--LIDQGNLVYKQRESNKIYLTNDIRKMLNRSILAHPTWC--VKKVPDKLGYRD 175
D 123 ENNNKIERKLN-----QEKCVKDPFLKELKTNLFPTWAKVIKELYKAVG--- 173
QY 176 LVPEDYDFAIRGALADFKIGLNKVLQYRLNENGISQT-NKFKQIYSAILODFYKEX 234
D 174 LISLE-----NAKINMAEDVLLYPL--INISNTIFHLSTKLNLYNQINNSITK 220
QY 235 SYDITKITNYPQ-----YVIRK-----RYTQOELSKYFELKSPSITIRKLYIC-- 280
D 221 T-LTIQIKINIGQDNVLYLKKQYNNVFNLTLLKLEFYLIEKYSLSKRNVLCKF 279
QY 281 LYLVEK 286
D 280 INIFK 285

RESULT 7
US-10-303-161-31
Sequence 31, Application US/10303161
Publication No. US20030148459A1
GENERAL INFORMATION:
APPLICANT: Gilbert, Michel
APPLICANT: Wakarchuk, Warren W.
APPLICANT: National Research Council of Canada
TITLE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis of
FILE REFERENCE: 019633-000111US
CURRENT APPLICATION NUMBER: US/10/303,161
CURRENT FILING DATE: 2002-11-21

PRIOR APPLICATION NUMBER: US/09/816,028
PRIOR FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: US 60/118,213
PRIOR FILING DATE: 1999-02-01
PRIOR APPLICATION NUMBER: US 09/495,406
PRIOR FILING DATE: 2000-01-31
NUMBER OF SEQ ID NOS: 49
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 31
LENGTH: 297
TYPE: PRT
ORGANISM: Campylobacter jejuni
FEATURE:
OTHER INFORMATION: beta-1,3 galactosyl transferase from C. jejuni O:10
US-10-303-161-31

Query Match 14.9%; Score 237; DB 14; Length 297;
Best Local Similarity 27.8%; Pred. No. 3,3e-13; Matches 85; Conservative 61; Mismatches 112; Indels 48; Gaps 14;
QY 4 SIMSVNEPLNVRSDVESILNQTLDPEFIIIVIDNPSRGDLKQFLTEYSVVDNRKIL 63
D 5 SILPTVNE-QYIARAIBSCINQTFKNE-IIVDDCGSDSIDIVKEYAKKDDRIKIL 62
QY 64 LNEENIGLASSLNKAVKISGEYIFRMDADDISYSPRFDKQIRFMEENSID--FSATLI 120
D 63 HNEENKLTARAYEGVAVNSPYIMFLDPDYEELNACECKMLKNNIEDLFFNAFVL 122
QY 121 E--LIDQGNLVYKQRESNKIYLTNDIRKMLNRSILAHPTWC--VKKVPDKLGYRD 175
D 123 ENNNKIERKLN-----QEKCVKDPFLKELKTNLFPTWAKVIKELYKAVG--- 173
QY 176 LVPEDYDFAIRGALADFKIGLNKVLQYRLNENGISQT-NKFKQIYSAILODFYKEX 234
D 174 LISLE-----NAKINMAEDVLLYPL--INISNTIFHLSTKLNLYNQINNSITK 220
QY 235 SYDITKITNYPQ-----YVIRK-----RYTQOELSKYFELKSPSITIRKLYIC-- 280
D 221 T-LTIQIKINIGQDNVLYLKKQYNNVFNLTLLKLEFYLIEKYSLSKRNVLCKF 279
QY 281 LYLVEK 286
D 280 INIFK 285

RESULT 8
US-10-303-118-31
Sequence 31, Application US/10303118
Publication No. US20030157655A1
GENERAL INFORMATION:
APPLICANT: Gilbert, Michel
APPLICANT: Wakarchuk, Warren W.
APPLICANT: National Research Council of Canada
TITLE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis of
FILE REFERENCE: 019633-000111US
CURRENT APPLICATION NUMBER: US/10/303,118
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US/09/816,028
PRIOR FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: US 60/118,213
PRIOR FILING DATE: 1999-02-01
PRIOR APPLICATION NUMBER: US 09/495,406
PRIOR FILING DATE: 2000-01-31
NUMBER OF SEQ ID NOS: 49
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 31
LENGTH: 297
TYPE: PRT
ORGANISM: Campylobacter jejuni
FEATURE:
OTHER INFORMATION: beta-1,3 galactosyl transferase from C. jejuni O:10
US-10-303-118-31


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      / PRIOR APPLICATION NUMBER: US 09/495,406
      / PRIOR FILING DATE: 2000-01-31
      / NUMBER OF SEQ ID NOS: 49
      / SOFTWARE: PatentIn Ver. 2.1
      / SEQ ID NO 27
      / LENGTH: 301
      / TYPE: PR1
      / ORGANISM: Campylobacter jejuni
      / FEATURES:
      / OTHER INFORMATION: beta-1,3-galactosyltransferase from C. jejuni strain
      / OTHER INFORMATION: OH4384 (ORF 6a of hlpoolisecacharide (LOS))
      / OTHER INFORMATION: biosynthesis locus)
US-09-816-028A-27

Query Match          14.7%; Score 234; DB 9; Length 301;
Best Local Similarity 28.2%; Pred. No. 6,3e-13;
Matches 88; Conservative 53; Mismatches 135; Indels 36; Gaps 13;

OY      4 SIIMSVNEPLNYRDSVESILNQLTDFEFIIIVIDNPSSRDGLQPTLEYSVVDNRKIKL 63
       |||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::
Db      5 SIIIPLYTNVE-QYLARAIEGICINQTFKDIE-IIIVDDCGANDNSINIAXEYRKDKRIKI 62
OY      64 LNEENITGLASSLNKAAYKISKCEIYFRNDADDISIFPSFDKQIRMEENSUDFSATLIEL 123
       |||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::
Db      63 HNEGNLTGLTRARYGVGVAVANSPYTMFLDPDQDYELNAECEBCTIKILDDED-EVDLVFNNAI 121
OY      124 DQGNLVLVKQESNR-IYLTNDIRKMLNLNRSILAHPTW-CVKKRVDFKLMGYEDLVFE 180
       |||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::
Db      123 VESMTVCVRKDEFGSGVSRRERPRKRRIKIAKNRYVTWTWAGKILRKIKVIYA----- 171

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01 181 DYDEAIGALADFIKGLINKVLQYRLNENGISQTNKFOYIYAGALLQDFYEKSYIDIT 240
02 172 ---FASRLBEDVXKINMAEDVLYYPM---LSQAOKIA--YMNCKNLYHYVPPNNNSICNT 222
03 241 K-----TNYFPEYIKKRYTQOE--LSKTFELKSTPSTIR-KYICLYLKFSLVRL 293
04 223 KNEVLVKNKNTQELQVINYLFQNTYLNKRC--SVLYVLKYLVLQYIKIKTKLWVTL 279
05 294 LINDINILVLT 305
06 280 LAK-INILTKI 290
07
08 RESULT 13
09 US-10-303-161-27
10 ; Sequence 27, Application US/10303161
11 ; Publication No. US20030148459A1
12 ; GENERAL INFORMATION:
13 ; APPLICANT: Gilbert, Michel
14 ; APPLICANT: Makarchuk, Warren W.
15 ; APPLICANT: National Research Council of Canada
16 ; TITLE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis of
17 ; TITLE OF INVENTION: Gangliosides and Ganglioside Mimics
18 ; FILE REFERENCE: 019633-00011IUS
19 ; CURRENT APPLICATION NUMBER: US/10/303,161
20 ; CURRENT FILING DATE: 2002-11-21
21 ; PRIOR APPLICATION NUMBER: US/09/816,028
22 ; PRIOR FILING DATE: 2001-03-21
23 ; PRIOR APPLICATION NUMBER: US 60/118,213
24 ; PRIOR FILING DATE: 1999-02-01
25 ; PRIOR APPLICATION NUMBER: US 09/495,406
26 ; PRIOR FILING DATE: 2000-01-31
27 ; NUMBER OF SEQ ID NOS: 49
28 ; SOFTWARE: PatentIn Ver. 2.1
29 ; SEQ ID NO: 27
30 ; LENGTH: 301
31 ; TYPE: PRT
32 ; ORGANISM: Campylobacter jejuni
33 ; FEATURE:
34 ; OTHER INFORMATION: beta-1,3-galactosyltransferase from C. jejuni strain
35 ; OTHER INFORMATION: OH4384 (ORF 6a of lipoiligosaccharide (LOS))
36 ; OTHER INFORMATION: biosynthesis locus)
37
38 US-10-303-161-27

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Query Match 14.7%; Score 234; DB 14; Length 301;
 Best Local Similarity 28.2%; Pred. No. 6.3e-13;
 Matches 88; Conservative 53; Mismatches 135; Indels 36; Gaps 13;

QY 4 SIIMSVPNEPLNYVDSVESILNQTLDPEFIIVINDPSRQDLKQFLTEYSVVDNRKIL 63
 DB 5 SIILPTVNV- QYARAIESCINQTFKDI- IIVDDCGNDSINIAKEYSKDKRIKII 62
 QY 64 LNEENIGLASSLNKAVIKSGEYIFRMDADISYSPRDKQIRFMEENSLDPSATLIELI 123
 DB 63 HNEKULGLRARVEGVKANSPIYIMFLDPDYLELNACEBCKILDEOD- EVDLVFFNAI 121
 QY 124 DQGNLVYKQRESNK- IYLTNDIRKMLNRSILAHPTW- CVKKVFPDKMGYRDLVVE 180
 DB 122 VESNVIYSKKFPDNGFSYKKEFEVKI IAKKULYWTMGKILRKLYLEA----- 171
 QY 181 DYDFAIRGALADPKIGLNLKVLQYRLNENGISQTNKFKQIYSAILOPFYKESYIDIT 240
 DB 172 ---FASLRLEKDVKIMMAEDVLVYPM---LSQAOKIA--YMNCLHYVPPNNSICNT 222
 QY 241 K---ITNYFOEYVYKRYTQOE--LSKYFELKSTPSITIR-KLYICLYLFXSPLYRRL 293
 DB 223 KNEVLVKNNIQELGLVNLRYLQNYILNKYC---SVLYVILKYLVIQIYKIKRTLMVTL 279
 QY 294 LINDINIIVLKL 305
 DB 280 LAK-INILTLKI 290

RESULT 14
 US-10-303-118-27
 ; Sequence 27, Application US/10303118
 ; Publication No. US20030157656A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gilbert, Michel
 ; APPLICANT: Wakarchuk, Warren W.
 ; APPLICANT: National Research Council of Canada
 ; TITLE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis of
 ; TITLE OF INVENTION: Gangliosides and Ganglioside Mimics
 ; FILE REFERENCE: 019633-000111US
 ; CURRENT APPLICATION NUMBER: US/10/303,118
 ; CURRENT FILING DATE: 2002-11-21
 ; PRIOR APPLICATION NUMBER: US/09/816,028
 ; PRIOR FILING DATE: 2001-03-21
 ; PRIOR APPLICATION NUMBER: US 60/118,213
 ; PRIOR FILING DATE: 1999-02-01
 ; PRIOR APPLICATION NUMBER: US 09/495,406
 ; PRIOR FILING DATE: 2000-01-31
 ; NUMBER OF SEQ ID NOS: 49
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 27
 ; LENGTH: 301
 ; TYPE: PRF
 ; ORGANISM: Campylobacter jejuni
 ; FEATURES:
 ; OTHER INFORMATION: beta-1,3-galactosyltransferase from C. jejuni strain
 ; OTHER INFORMATION: OH4384 (ORF 6a of 11pooligosaccharide (LOS))
 ; OTHER INFORMATION: biosynthesis locus)
 US-10-303-118-27

Query Match 14.7%; Score 234; DB 14; Length 301;
 Best Local Similarity 28.2%; Pred. No. 6.3e-13;
 Matches 88; Conservative 53; Mismatches 135; Indels 36; Gaps 13;

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 QY 124 DQGNLVYKQRESNK- IYLTNDIRKMLNRSILAHPTW- CVKKVFPDKMGYRDLVVE 180
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 QY 181 DYDFAIRGALADPKIGLNLKVLQYRLNENGISQTNKFKQIYSAILOPFYKESYIDIT 240
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 QY 294 LINDINIIVLKL 305
 DB 280 LAK-INILTLKI 290

QY 124 DQGNLVYKQRESNK- IYLTNDIRKMLNRSILAHPTW- CVKKVFPDKMGYRDLVVE 180
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RESULT 15
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 ; Sequence 27, Application US/10303128
 ; Publication No. US20030157656A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gilbert, Michel
 ; APPLICANT: Wakarchuk, Warren W.
 ; APPLICANT: National Research Council of Canada
 ; TITLE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis of
 ; TITLE OF INVENTION: Gangliosides and Ganglioside Mimics
 ; FILE REFERENCE: 019633-000111US
 ; CURRENT APPLICATION NUMBER: US/10/303,128
 ; CURRENT FILING DATE: 2002-11-21
 ; PRIOR APPLICATION NUMBER: US/09/816,028
 ; PRIOR FILING DATE: 2001-03-21
 ; PRIOR APPLICATION NUMBER: US 60/118,213
 ; PRIOR FILING DATE: 1999-02-01
 ; PRIOR APPLICATION NUMBER: US 09/495,406
 ; PRIOR FILING DATE: 2000-01-31
 ; NUMBER OF SEQ ID NOS: 49
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 27
 ; LENGTH: 301
 ; TYPE: PRF
 ; ORGANISM: Campylobacter jejuni
 ; FEATURES:
 ; OTHER INFORMATION: beta-1,3-galactosyltransferase from C. jejuni strain
 ; OTHER INFORMATION: OH4384 (ORF 6a of 11pooligosaccharide (LOS))
 ; OTHER INFORMATION: biosynthesis locus)
 US-10-303-128-27

Query Match 14.7%; Score 234; DB 14; Length 301;
 Best Local Similarity 28.2%; Pred. No. 6.3e-13;
 Matches 88; Conservative 53; Mismatches 135; Indels 36; Gaps 13;

QY 4 SIIMSVPNEPLNYVDSVESILNQTLDPEFIIVINDPSRQDLKQFLTEYSVVDNRKIL 63
 DB 5 SIILPTVNV- QYARAIESCINQTFKDI- IIVDDCGNDSINIAKEYSKDKRIKII 62
 QY 64 LNEENIGLASSLNKAVIKSGEYIFRMDADISYSPRDKQIRFMEENSLDPSATLIELI 123
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Mon Mar 29 10:07:20 2004

us-09-900-038a-1.rapb

Page 8

3-
Db 280 LAK-INITLKI 290

Search completed: March 24, 2004, 22:41:14
Job time : 46 secs

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OW nucleic - nucleic search, using sw model

Run on: March 28, 2004, 07:07:48 ; Search time 411 seconds

(without alignments)
8505.854 Million cell updates/sec

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Perfect score: 939
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Gapop 10.0, Gapext 1.0

Searched: 2458946 seqs, 1861504846 residues

Total number of hits satisfying chosen parameters: 4917892

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: Published Applications NA:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	939	100.0	6865	9 US-09-900-038a-3	Sequence 2, Appl
3	118	12.6	1002	12 US-10-282-122A-15868	Sequence 15868, A
4	95.2	10.1	1011	12 US-10-282-122A-15851	Sequence 15851, A
5	84	8.9	1002	12 US-10-282-122A-15985	Sequence 15985, A
6	76.2	8.1	3673778	14 US-10-312-841-1	Sequence 1, Appl
7	73.6	7.8	1830121	14 US-10-329-960-1	Sequence 1, Appl
8	73.6	7.8	1830121	15 US-10-329-960-1	Sequence 1, Appl
9	73.2	7.8	891	9 US-09-816-028A-30	Sequence 30, Appl
10	73.2	7.8	891	14 US-10-303-118-30	Sequence 30, Appl
11	73.2	7.8	891	14 US-10-303-118-30	Sequence 30, Appl
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15	71.6	7.6	747	12 US-10-282-122A-17153	Sequence 17153, A

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ALIGNMENTS

RESULT 1

US-09-900-038a-2

Sequence 2, Application US/09900038A

Patent No. US20020142425A1

GENERAL INFORMATION:

APPLICANT: Miyake, Katsunide

APPLICANT: Matsubae, Masaki

APPLICANT: Iijima, Shiro

TITLE OF INVENTION: Beta 1,3-galactosyltransferase and DNA encoding the same

FILE REFERENCE: 766.53

CURRENT APPLICATION NUMBER: US/09/900.038A

CURRENT FILING DATE: 2001-09-21

PRIOR APPLICATION NUMBER: JP 2001-392

PRIOR FILING DATE: 2001-01-05

NUMBER OF SEQ ID NOS: 8

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 2

LENGTH: 939

TYPE: DNA

ORGANISM: Streptococcus agalactiae Type Ib

US-09-900-038a-2

Query Match 100.0%; Score 939; DB 9; Length 939;

Best Local Similarity 100.0%; Pred. No. 3.2e+166; Indels 0; Gaps 0;

Matches 939; Conservative 0; Mismatches 0

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1 ATGAATTATAGATCATATGCGGTATATATAGAGCCTTAATATATATGAGAGATCA 60

61 GTAGAT 120

61 GTAGAT 120

61 GTAGAT 120

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121 CCAAGTATAGGATGATTAAGCAATTTCTTAACAGATATTCAGTTGATATATATATAT 180

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RESULT 2
US-09-900-038a-3
Sequence 3, Application US/09900038a
Patent No. US2002042425A1
GENERAL INFORMATION:
APPLICANT: Miyake, Katsuhide
APPLICANT: Matanabe, Masaki
APPLICANT: Iijima, Shinji
TITLE OF INVENTION: Beta 1,3-galactosyltransferase and DNA encoding the same
FILE REFERENCE: 766.53
CURRENT APPLICATION NUMBER: US/09/900,038a
PRIORITY FILING DATE: 2001-09-21
PRIORITY APPLICATION NUMBER: JP 2001-392
PRIORITY FILING DATE: 2001-01-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 3
LENGTH: 6865
TYPE: DNA
ORGANISM: Streptococcus agalactiae type Ib

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LOCATION: (617) .. (1789)
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LOCATION: (5009) .. (5947)
US-09-900-038a-3

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Query Match 100.0%; Score 939; DS 9; Length 6865;

Best Local Similarity 100.0%; Pred No. 6, 4e-166; Indels 0; Gaps 0;

Matches 939; Conservative 0; Mismatches 0;

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1. APPLICANT: Wang, Jiansun
2. APPLICANT: Zamudio, Carlos
3. APPLICANT: Malone, Cheryl
4. APPLICANT: Haselbeck, Robert
5. APPLICANT: Ohlsen, Kari
6. APPLICANT: Zykkind, Judith
7. APPLICANT: Wells, Daniel
8. APPLICANT: Trawick, John
9. APPLICANT: Carr, Grant
10. APPLICANT: Yamamoto, Robert
11. APPLICANT: Forsyth, R.

APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: 60/230,347
PRIOR FILING DATE: 2000-09-09
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 78614
SOFTWARE: PatentIn version 3.1
SEQ ID NO: 15651
LENGTH: 1011
TYPE: DNA
ORGANISM: Clostridium acetobutylicum
US-10-282-122A-15651

Query Match 10.1%; Score 95.2; DB 12; Length 1011;
Best Local Similarity 50.1%; Pred. No. 2.3e-08;
Matches 333; Conservative 0; Mismatches 333; Indels 18; Gaps 4;

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DB 529 TATGAAAGAAATATGATCTGCAAGAGATTAATGATTTGTGTTAAGGGCTATTAAGAAAT 588

QY 574 GATTCCAAATGCGCTTACTCAATAAGACTTTTACAGTATAGATTAACAGAAATGA 633
DB 589 GATATATAGATAGTGAATGAGATGATGATCTTAATTAATAGAGGTTCCACATTAATCT 648
QY 634 ATATCAACAACCAATAGTTTAAGCAATATATTACTGCTATTTTACAGATTTTAT 693
DB 649 AAAACAGCGATGGAATGTTTAACTCTAAGATGTTGAATATACATGAAAGCAAGATA 708
QY 694 AAAGAAATCTTATATGATATCAACMAAATTAATTAATCTT 737
DB 709 GATTATATTAATGATATCAATATAAAGACAAAGTATGATCTT 752

RESULT 5
US-10-282-122A-15985
Sequence 15985, Application US/10282122A
Publication No. US20040029129A1
GENERAL INFORMATION:
APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malote, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Karl
APPLICANT: Zyskind, Judith
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John
APPLICANT: Carr, Grant
APPLICANT: Yamamoto, Robert
APPLICANT: Forsyth, R.
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: 60/230,347
PRIOR FILING DATE: 2000-09-09
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 78614
SOFTWARE: PatentIn version 3.1
SEQ ID NO: 15985
LENGTH: 1002
TYPE: DNA
ORGANISM: Clostridium acetobutylicum
US-10-282-122A-15985

Query Match 8.9%; Score 84; DB 12; Length 1002;
Best Local Similarity 57.9%; Pred. No. 2.8e-06;
Matches 169; Conservative 0; Mismatches 120; Indels 3; Gaps 1;

QY 42 AAATATGTGAGATTCAGTATGATATTAATTAATCAAGCTTACTGATTTTGAATT 101
DB 36 AAAATATTTAGAGATATTAAGAAAGATCTAATAAACAAGCTATAGATTTGAAAT 95
QY 102 CATTAATGTCTATGATTAATCAAGTAGAGTGAATTTAAAGCAATTTCTTAACAGAAATATTC 161

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OY      554 CAATTAAGAGGAGCTCGTGGCTGATTTCAAATTCGGCTTACTCAATPAAGTACTTTTACAGT   613
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OY      614 ATAGATTMAACGAGMATGGAATATCACAAACCAATTAAGTTTAGCAAATATATTACTCAG   673
Db      1714825 ATAAATATATATATATATAAATATATATATATATAAATATATATAAATATATATAAATA   1714766
OY      674 CTATTTTACAAGATTTTATATTAAGAANAATCTTATATGTGATATACAAAAATTTCTAAT   733
Db      1714765 TACATATAAAAATATATATATATAAATATATCATATATAAATATACATATATAAATACATATA   1714706
OY      734 ACTTCAAGATATGTATGATTAAGAAAGCTATACTCAGCAAGAGCTCTCTATAATTTTTTG   793
Db      1714705 AAATATATCATATATAAATATATACATATAAATATATATAAATAATATATATAAATATATAT   1714646
OY      794 AGCTPAAATCTTACCCTTAGTATTCTATTTAGAAAACCTATATTT   838
Db      1714645 ATAAATATATATATATATAAATATATATATATAAATATATATAT   1714601

RESULT 7
US-10-329-960-1
; Sequence 1, Application US/10329960
; Publication No. US20030099277A1
GENERAL INFORMATION:
; APPLICANT: Fleischmann et al.
; TITLE OF INVENTION: Nucleotide sequence of the Haemophilus influenzae Rd Genome, Fra
; FILE REFERENCE: Pbl651
CURRENT APPLICATION NUMBER: US/10/329,960
CURRENT FILING DATE: 2003-01-02
PRIOR APPLICATION NUMBER: US 09/643,990
PRIOR FILING DATE: 2000-08-23
PRIOR APPLICATION NUMBER: US 08/487,429
PRIOR FILING DATE: 1995-06-07
PRIOR APPLICATION NUMBER: US 08/426,787
PRIOR FILING DATE: 1995-04-21
NUMBER OF SEQ ID NOS: 1
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 1830121
TYPE: DNA
ORGANISM: Haemophilus influenzae
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LOCATION: (4747)..(4747)
OTHER INFORMATION: n equals a, t, g or c
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OTHER INFORMATION: n equals a, t, g or c
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NAME/KEY: misc_feature

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; LOCATION: (152500)..(152500)
; OTHER INFORMATION: n equals a, t, g or c
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (152530)..(152530)

Query Match
Best Local Similarity 54.3%; Score 73.6; DB 14; Length 1830121;
Matches 167; Conservative 0; Mismatches 134; Indels 3; Gaps 1;

QY 30 TAATGACCTTAAATATGAGAGATTCAGTAGATATATATTAATCAACGCTTAC 89
DB 1646128 TTATACGCTGAGCAATATATATGATGAAAGACATTTATCATATTAACACACTTATTA 1646187
QY 90 TGAATTTGACTTCATATATTTGTCATGATATATCCAGTAGAGGTGATTTAAAGCAATCTT 149
DB 1646188 AATCTAGAAATATATAGTTATCATGATGATGTCACAGATTGACCTTGTCTCA--TTT 1646244
QY 150 AACGAAATATTCAGTGTGATATATGATATATATATATATATATATATATATATG 209
DB 1646245 AGAAGAAATATCTAAATATGATATATATATATATATATATATATATATATAG 1646304
QY 210 TTAGCATCAAGTTTGAACCAAGCGTGAATTTCTTAAAGGAGATATATATTTAGAA 269
DB 1646305 GTTCATAAATCTTTGAAATATAGCGCTGTGTTTTCAGGTAAATATTTGCAAGAA 1646364
QY 270 GGAATGCTGATGATATTTCAATTCAGTAGATTTGATTAAGCAATTCGTTTATGAGGA 329
DB 1646365 GGATGCTGATGATATGATTAACCATGCTGATGAGAAATATGTAACCTATCTGAGAA 1646424
QY 330 AAT 333
DB 1646425 AAT 1646428

RESULT 8
US-10-329-670-1
; Sequence 1, Application US/10329670
; Publication No. US20040018503A1
; GENERAL INFORMATION:
; APPLICANT: Pleischmann et al.
; TITLE OF INVENTION: Nucleotide Sequence of the Haemophilus influenzae Rd Genome, Frag
; FILE REFERENCE: PB186P1
; CURRENT APPLICATION NUMBER: US/10/329,670
; CURRENT FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: US 09/643,990
; PRIOR FILING DATE: 2000-08-23
; PRIOR APPLICATION NUMBER: US 08/487,429
; PRIOR FILING DATE: 1995-06-07
; PRIOR APPLICATION NUMBER: US 08/426,787
; PRIOR FILING DATE: 1995-04-21
; NUMBER OF SEQ ID NOS: 1
; SOFTWARE: Patent version 3.1
; SEQ ID NO 1
; LENGTH: 1830121
; TYPE: DNA
; ORGANISM: Haemophilus influenzae
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4747)..(4747)
; OTHER INFORMATION: n equals a, t, g or c
; FEATURE:
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; LOCATION: (9921)..(9921)
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; OTHER INFORMATION: n equals a, t, g or c
; FEATURE:
; NAME/KEY: misc feature
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; OTHER INFORMATION: n equals a, t, g or c
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; LOCATION: (36543)..(36543)
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; FEATURE:
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NAME/KEY: misc_feature
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OTHER_INFORMATION: n equals a, t, g or c
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Query Match 7.8%; Score 73.6; DB 15; Length 1830121;
Beat Local Similarity 54.9%; Pred. No. 0.0034;
Matches 167; Conservative 0; Mismatches 134; Indels 3; Gaps 1;

QY 30 TAAAGACCTTTAAATATATGAGAGATTGACAGAACTTAATATTAATCAAGCCTTAC 89
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QY 90 TGATTTGAGTGCATATTCGATTCGATTAATCCAGAGAGAGGATATTAAGCAATCTT 149
DB 1646188 AAACTCTGAATTATATAGTATCAATATGATGGTCAACAGATTGACTTTGCTCA---TTT 1646244
QY 150 AACAGAAATATTCACGTTGATGATTAATAGAAATATAAATCTTGCTTAAGAGAGAAATATTGG 209
DB 1646245 AGAAGAAATATCTAAATATAGATTAAGATTAAGATTAATAATATACGTAATTAATTAATTAGG 1646304
QY 210 TTTCGATCAAGTTTGAACAAAGCGGTGAAATTTCTTAAGGAGAAATATATTTTAGAT 269
DB 1646305 GTTCATATAATCTTTGGAATATAGGCGCTTGCTGTTGTTTCAGGTAAATATTTTGCAGAGAT 1646366
QY 270 GGATGCGTATGATATTTTCATATCCAGTAGATTGGATAGCAAAATCGTTTATGAGAGA 329
DB 1646365 GGAAGCTGATGATATAGCTTAACCATGCTGATTTAGAGAAATAGTACCTATCTGAGAGA 1646422
QY 330 AAAAT 333
DB 1646425 AAAAT 1646428

RESULT 9
US-09-816-028A-30
/ Sequence 30, Application US/09816028A
/ Patent No. US20020042369A1
/ GENERAL INFORMATION:
/ APPLICANT: Gilbert, Michel
/ APPLICANT: Makarchuk, Warren W.
/ APPLICANT: National Research Council of Canada
/ TITLE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis of
/ FILE REFERENCE: 019633-03011IUS
/ CURRENT APPLICATION NUMBER: US/09/816, 028A
/ CURRENT FILING DATE: 2001-03-21
/ PRIOR APPLICATION NUMBER: US 60/118, 213
/ PRIOR FILING DATE: 1999-02-01
/ PRIOR APPLICATION NUMBER: US 09/495, 406
/ PRIOR FILING DATE: 2000-01-31
/ NUMBER OF SEQ ID NOS: 49
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 30
/ LENGTH: 891
/ TYPE: DNA
/ ORGANISM: Campylobacter jejuni
/ FEATURE:
/ NAME/KEY: CDS

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LOCATION: (1)..(891)
OTHER INFORMATION: beta-1,3 galactosyl transferase from C. jejuni O:10
US-09-816-028A-30

Query Match 7.8%; Score 73.2; DB 9; Length 891;
Best Local Similarity 49.1%; Pred. No. 0.00028;
Matches 223; Conservative 0; Mismatches 228; Indels 3; Gaps 1;

QY 1 ATGAATATAGTATCATATGTCGTATATATAGACCTTTAAATATGAGAGATTCA 60
DB 1 ATGTTTAAATTTCAATCATCTTCCACTTAATATGGAACAATATATAGCAAGGCA 60
QY 61 GTAGAACTATATTAATCAACAGCTTACTGATTTTGAGTCAATATGCTATGATAT 120
DB 61 ATGAAAGTGTATCAATCAGACTTTTAAATATAGAA--ATAATTTGATGATGAT 117
QY 121 CCAAGTAGAGTATTAAGCAATCTTACAGATATTCAGTTGATATATAGATA 180
DB 118 TGTGAAAGTGCACAAAGTATGATATAGTTAAAGAAATGCCCCAAAAGATGATGATA 177
QY 181 AAATCTTGCTTATATGAGAAATATGTTTACATCAAGTTGAACAAAGCGTGAAA 240
DB 178 AAATCATACATATGAGAAATTTTAAACCTTTTAAAGCTGATATGAGGTGTA 237
QY 241 ATTTCTAAGGAGAAATATTTTAAAGATGATGCTGATGATATTCATATCCAGTATA 300
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QY 301 TTGATATAGCAAAATTCCTTTTATGAGAGAAATTCATTTGATTTCTCAGCACTTATA 360
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QY 361 GAATGATAGCCAAAAGAAATTTGATATATTAACAGAGAAATATTAATATATC 420
DB 358 TTTGATTTGAAATATACATTAATTAAGAAAGATGTAATTTTCAAGAAAATGTTAT 417
QY 421 TTAATATGATATAGCAAGATGTTATGATA 454
DB 418 GTAAAAAAGATTTTAAAGAACTATTAATA 451

RESULT 10
US-10-303-161-30
Sequence 30, Application US/10303161
Publication No. US20030148459A1
GENERAL INFORMATION:
APPLICANT: Wakarchuk, Michel
APPLICANT: Gilbert, Warren W.
TITLE OF INVENTION: National Research Council of Canada
TITLE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis of
FILE REFERENCE: 019633-000111US
CURRENT APPLICATION NUMBER: US/10/303,161
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US/09/816,028
PRIOR FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: US 60/118,213
PRIOR FILING DATE: 1999-02-01
PRIOR APPLICATION NUMBER: US 09/495,406
PRIOR FILING DATE: 2000-01-31
NUMBER OF SEQ ID NOS: 49
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 30
LENGTH: 891
TYPE: DNA
ORGANISM: Campylobacter jejuni
FEATURE:
NAME/KEY: CDS
LOCATION: (1)..(891)
OTHER INFORMATION: beta-1,3 galactosyl transferase from C. jejuni O:10
US-10-303-161-30

Query Match 7.8%; Score 73.2; DB 14; Length 891;

Best Local Similarity 49.1%; Pred. No. 0.00028;
Matches 223; Conservative 0; Mismatches 228; Indels 3; Gaps 1;

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DB 61 ATGAAAGTGTATCAATCAGACTTTTAAATATAGAA--ATAATTTGATGATGAT 117
QY 121 CCAAGTAGAGTATTAAGCAATCTTACAGATATTCAGTTGATATATAGATA 180
DB 118 TGTGAAAGTGCACAAAGTATGATATAGTTAAAGAAATGCCCCAAAAGATGATGATA 177
QY 181 AAATCTTGCTTATATGAGAAATATGTTTACATCAAGTTGAACAAAGCGTGAAA 240
DB 178 AAATCATACATATGAGAAATTTTAAACCTTTTAAAGCTGATATGAGGTGTA 237
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DB 238 GTAGCAAACTCTCTTATATATATGTTTAAATCTGATGATATTTAGAACTTAATGCT 297
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QY 361 GAATGATAGCCAAAAGAAATTTGATATATTAACAGAGAAATATTAATATATC 420
DB 358 TTTGATTTGAAATATACATTAATTAAGAAAGATGTAATTTTCAAGAAAATGTTAT 417
QY 421 TTAATATGATATAGCAAGATGTTATGATA 454
DB 418 GTAAAAAAGATTTTAAAGAACTATTAATA 451

RESULT 11
US-10-303-118-30
Sequence 30, Application US/10303118
Publication No. US20030157655A1
GENERAL INFORMATION:
APPLICANT: Wakarchuk, Michel
APPLICANT: Gilbert, Warren W.
TITLE OF INVENTION: National Research Council of Canada
TITLE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis of
FILE REFERENCE: 019633-000111US
CURRENT APPLICATION NUMBER: US/10/303,118
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US/09/816,028
PRIOR FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: US 60/118,213
PRIOR FILING DATE: 1999-02-01
PRIOR APPLICATION NUMBER: US 09/495,406
PRIOR FILING DATE: 2000-01-31
NUMBER OF SEQ ID NOS: 49
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 30
LENGTH: 891
TYPE: DNA
ORGANISM: Campylobacter jejuni
FEATURE:
NAME/KEY: CDS
LOCATION: (1)..(891)
OTHER INFORMATION: beta-1,3 galactosyl transferase from C. jejuni O:10
US-10-303-118-30

Query Match 7.8%; Score 73.2; DB 14; Length 891;
Best Local Similarity 49.1%; Pred. No. 0.00028;
Matches 223; Conservative 0; Mismatches 228; Indels 3; Gaps 1;

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Db      61  ATGGAAGTGTATCATCATGACCTTTTAAATATATGA---AAATATGTAGTATGAT 117
Qy      121  CCAAGTAGAGGTGATTTAAAGCAATCTTAAACGAATATTCAGTTGTGATATATGAATA 180
Db      118  TGTGGAAGTGACAAAGATATAGTATATGTAAGATATGCCMAAAAGATGATGAATA 177
Qy      181  AAAATCTGCTTAATGAGAAAATATGTTAGATCAAGTTGACAAAAGCGGTGAAA 240
Db      178  AAAATATATATATATATGAAAATTTAAACCTTTTAAAGCTAGATATGAGAGGTGAAA 237
Qy      241  ATTTCTAAGGAGATATATTTTATGATGATGCTGATGATATTTCAATTCAGATGAGA 300
Db      238  GTAGCAAACTCTCTTATATATGTTTATGATCTCGATGATTTATTTAGAACTTATGCT 297
Qy      301  TTTGATAGCAAAATTCGTTTATGAGGAAAATTCATGATTTTCCAGCAACTATATA 360
Db      298  TGTGAAGATGTATGAAAATTTTAAACCAATGAAATGATTTATTTTATATGCA 357
Qy      361  GAATGATAGACCAAAAGAAATTTAGTATATAAACGAGAAAGTATATATATATAC 420
Db      358  TTTGATGGAATAATACATATATATGAAAGAAAGTTGAATTTTCAAGAAAATGTTAT 417
Qy      421  TTAACCTAATGATATACGGAAGATGTTATGATA 454
Db      418  GTAAAAAAGATTTTAAAAAGACTATTTAAAAA 451

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RESULT 12
US-10-303-128-30
; Sequence 30, Application US/10303128
; Publication No. US20030157656A1
; GENERAL INFORMATION:
; APPLICANT: Gilbert, Michel
; APPLICANT: Wakarchuk, Warren W.
; APPLICANT: National Research Council of Canada
; TITLE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis of
; TITLE OF INVENTION: Gangliosides and Ganglioside Mimics
; FILE REFERENCE: 019633-00011US
; CURRENT APPLICATION NUMBER: US/10/303,128
; CURRENT FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: US/09/816,028
; PRIOR FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: US 60/118,213
; PRIOR FILING DATE: 1999-02-01
; PRIOR APPLICATION NUMBER: US 09/495,406
; PRIOR FILING DATE: 2000-01-31
; NUMBER OF SEQ ID NOS: 49
; SOFTWARE: PatentIn Ver. 2.1
; LENGTH: 891
; SEQ ID NO 30
; TYPE: DNA
; ORGANISM: Campylobacter jejuni
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(891)
; OTHER INFORMATION: beta-1,3 galactosyl transferase from C. jejuni O:10
US-10-303-128-30

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Query Match      7.8%; Score 73.2; DB 14; Length 891;
Best Local Similarity 49.1%; Pred. No. 0.00028;
Matches 223; Conservative 0; Mismatches 228; Indels 3; Gaps 1;

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Qy      1  ATGAATATAGTATCATATATGCGTATATATATGAGCCTTTAATATATGAGAGATTCA 60
Db      1  ATGTTAAATTTCAATCATCTTCCCACTTAATATGAGCAATATATATGAGAGGCA 60
Qy      61  GTAGATCTATATTAATCAAAAGCTTACTGATTTTGAAGTTCATATTTGCTATGATAT 120
Db      61  ATGGAAGTGTATCATCATGACCTTTTAAATATATGA---AAATATGTAGTATGAT 117

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Qy      121  CCAAGTAGAGGTGATTTAAAGCAATCTTAAACGAATATTCAGTTGATATATAGATA 180
Db      118  TGTGGAAGTGACAAAGATATAGTATATGTAAGATATGCCMAAAAGATGATGAATA 177
Qy      181  AAAATCTGCTTAATGAGAAAATATGTTAGATCAAGTTGACAAAAGCGGTGAAA 240
Db      178  AAAATATATATATATATGAAAATTTAAACCTTTTAAAGCTAGATATGAGAGGTGAAA 237
Qy      241  ATTTCTAAGGAGATATATTTTATGATGATGCTGATGATATTTCAATTCAGATGAGA 300
Db      238  GTAGCAAACTCTCTTATATATGTTTATGATCTCGATGATTTATTTAGAACTTATGCT 297
Qy      301  TTTGATAGCAAAATTCGTTTATGAGGAAAATTCATGATTTTCCAGCAACTATATA 360
Db      298  TGTGAAGATGTATGAAAATTTTAAACCAATGAAATGATTTATTTTATATGCA 357
Qy      361  GAATGATAGACCAAAAGAAATTTAGTATATAAACGAGAAAGTATATATATATAC 420
Db      358  TTTGATGGAATAATACATATATATGAAAGAAAGTTGAATTTTCAAGAAAATGTTAT 417
Qy      421  TTAACCTAATGATATACGGAAGATGTTATGATA 454
Db      418  GTAAAAAAGATTTTAAAAAGACTATTTAAAAA 451

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RESULT 13
US-10-303-134-30
; Sequence 30, Application US/10303134
; Publication No. US20030157657A1
; GENERAL INFORMATION:
; APPLICANT: Gilbert, Michel
; APPLICANT: Wakarchuk, Warren W.
; APPLICANT: National Research Council of Canada
; TITLE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis of
; TITLE OF INVENTION: Gangliosides and Ganglioside Mimics
; FILE REFERENCE: 019633-00011US
; CURRENT APPLICATION NUMBER: US/10/303,134
; CURRENT FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: US/09/816,028
; PRIOR FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: US 60/118,213
; PRIOR FILING DATE: 1999-02-01
; PRIOR APPLICATION NUMBER: US 09/495,406
; PRIOR FILING DATE: 2000-01-31
; NUMBER OF SEQ ID NOS: 49
; SOFTWARE: PatentIn Ver. 2.1
; LENGTH: 891
; SEQ ID NO 30
; TYPE: DNA
; ORGANISM: Campylobacter jejuni
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(891)
; OTHER INFORMATION: beta-1,3 galactosyl transferase from C. jejuni O:10
US-10-303-134-30

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Query Match      7.8%; Score 73.2; DB 14; Length 891;
Best Local Similarity 49.1%; Pred. No. 0.00028;
Matches 223; Conservative 0; Mismatches 228; Indels 3; Gaps 1;

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Qy      1  ATGAATATAGTATCATATATGCGTATATATATGAGCCTTTAATATATGAGAGATTCA 60
Db      1  ATGTTAAATTTCAATCATCTTCCCACTTAATATGAGCAATATATATGAGAGGCA 60
Qy      61  GTAGATCTATATTAATCAAAAGCTTACTGATTTTGAAGTTCATATTTGCTATGATAT 120
Db      61  ATGGAAGTGTATCATCATGACCTTTTAAATATATGA---AAATATGTAGTATGAT 117
Qy      121  CCAAGTAGAGGTGATTTAAAGCAATCTTAAACGAATATTCAGTTGATATATAGATA 180
Db      118  TGTGGAAGTGACAAAGATATAGTATATGTAAGATATGCCMAAAAGATGATGAATA 177

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RESULT 14
US-10-303-162-30
; Sequence 30, Application US/10303162
; Publication No. US20030157658A1
;
GENERAL INFORMATION:
APPLICANT: Gilbert, Michel
APPLICANT: Wakarchuk, Warren W.
APPLICANT: National Research Council of Canada
TITLE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis of
FILE REFERENCE: 019633-00011US
CURRENT APPLICATION NUMBER: US/10/303,162
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US/03/816,028
PRIOR FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: US 60/118,213
PRIOR FILING DATE: 1999-02-01
PRIOR APPLICATION NUMBER: US 09/495,406
PRIOR FILING DATE: 2000-01-31
NUMBER OF SEQ ID NOS: 49
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 30
LENGTH: 891
TYPE: DNA
ORGANISM: Campylobacter jejuni
FEATURE:
NAME/KEY: CDS
LOCATION: (1)...(891)
OTHER INFORMATION: beta-1,3 galactosyl transferase from C. jejuni O:10
US-10-303-162-30

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Db 238 GTGCAAACTCTCCTTATATATAGTTTCTTAATCTGTGATATTTAGAACTTAATGCT 287

Oy 301 TTGATATACCAATTCGTTTATGAGAGAAATTCATGTATTTCTCAGCACTTATA 360

Db 298 TGTGAGAAATGATGAAAATTTTAAAAACATGAAATAGATTATATTTTAAATGCA 357

Oy 361 GAATTGATGACCAAAAAGAAATTTAGTATATTAACAACAGAAAGTATTAATAATAC 420

Db 358 TTGTGTTTGAAAAATPACATTAATTAATTAAGAAAGTTGAATTTTCAAGAAAATGTTAT 417

Oy 421 TTACTATATGATATACGAGAGATGTTATGATA 454

Db 418 GTAAAAAAGATTTTTTAAATAAACTATTTAAAAA 451

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RESULT 15
US-10-282-122A-17153
/ Sequence 17153, Application US/10282122A
/ Publication No. US20040029129A1
/ GENERAL INFORMATION:
/ APPLICANT: Wang, Liangsu
/ APPLICANT: Zamudio, Carlos
/ APPLICANT: Malone, Cheryl
/ APPLICANT: Haselbeck, Robert
/ APPLICANT: Ohlsen, Kari
/ APPLICANT: Zyskind, Judith
/ APPLICANT: Wall, Daniel
/ APPLICANT: Trawick, John
/ APPLICANT: Carr, Grant
/ APPLICANT: Yamamoto, Robert
/ APPLICANT: Forsyth, R.
/ APPLICANT: Xu, H.
/ TITLE OR INVENTION: Identification of Essential Genes in Microorganisms
/ FILE REFERENCE: EPIFRA.034A
/ CURRENT APPLICATION NUMBER: US/10/282,122A
/ CURRENT FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: 60/191,078
/ PRIOR FILING DATE: 2000-03-21
/ PRIOR APPLICATION NUMBER: 60/056,848
/ PRIOR FILING DATE: 2000-05-23
/ PRIOR APPLICATION NUMBER: 60/207,727
/ PRIOR FILING DATE: 2000-05-26
/ PRIOR APPLICATION NUMBER: 60/230,335
/ PRIOR FILING DATE: 2000-09-06
/ PRIOR APPLICATION NUMBER: 60/230,347
/ PRIOR FILING DATE: 2000-09-09
/ PRIOR APPLICATION NUMBER: 60/242,578
/ PRIOR FILING DATE: 2000-10-23
/ PRIOR APPLICATION NUMBER: 60/253,625
/ PRIOR FILING DATE: 2000-11-27
/ PRIOR APPLICATION NUMBER: 60/257,931
/ PRIOR FILING DATE: 2000-12-22
/ PRIOR APPLICATION NUMBER: 60/267,636
/ PRIOR FILING DATE: 2001-02-09
/ PRIOR APPLICATION NUMBER: 60/269,308
/ PRIOR FILING DATE: 2001-02-16
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 78614
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 17153
/ LENGTH: 747
/ TYPE: DNA
/ ORGANISM: Clostridium difficile
US-10-282-122A-17153

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Query Match	7.6%	Score 71.6	DB 12	Length 747
Best Local Similarity	51.3%	Pred. No. 0.0053		
Matches 122	Conservative 0	Mismatches 179	Indels 3	Gaps 1
QY	32	ATGAGCCTTAATATGAGAGATCACTGATCTATATTAATCAAGCCTTAC	91	
DB	38	ATATATTGAAAATTATGAGACACCATATAATCACTTTAAACCACTTCAAG	97	

Qy 92 ATTTGAGTTCATATGTCATTTGATATCCAGTAGAGTGATTTAAGCAATTCCTAA 151
 Db 98 AATGGGAAATGTTAAATTT--ATTGATGATTTGCTCAACGATAAATAGTCTAATATAGTCA 154
 Qy 152 CAGAAATATTCAGTTGTAGATATATAGAAATAAAATCTTGAATGAAGAAATATATGTT 211
 Db 155 AATCTTATATGCAACAGATAGTAGATATAAATATATAAAGACTGAGACTAATATAGGCTG 214
 Qy 212 TAGCATCAAGTTTGAACAAGGCGTGAATTTCTAAGGAGAAATATATTTTGAATCG 271
 Db 215 TCTCTAAAGCTTGAATTTAGCACTAAGTAAAGGCAACGACAAATTTATAGCTTTTAA 274
 Qy 272 ATGCTGATGATATTTCAATATCCAGTAGATTTGATTAAGCAATTCGTTTATGAGAGAA 331
 Db 275 ATAGTATGACCAATGGAATAGTAGTAAGTTAGAAAACAATAATTTATGTTAGAAA 334
 Qy 332 ATTCATGTGATTTCTCAGCAACTCTAATAGAAATGATAGACCAAAAAGAAATTTAGTAT 391
 Db 335 ATGACTATGTAAATTCATTTACTTCTCATATGAAGTATGATGAATAATGATAAAAATTA 394
 Qy 392 ATAAACAACGAGAA 405
 Db 395 ACAAAGTAAATAAA 408

Search completed: March 28, 2004, 08:50:48
 Job time : 438 secs